

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 4 and 5 have been withdrawn. Claims 6-12 have been added to more particularly distinguish and define the elements of Applicant's invention. Accordingly, Claims 1-3 and 6-12 remain in the case.

Support for newly added Claim 6 can be found in the specification on page 8, lines 28-31. Support for newly added Claim 7 can be found in the specification on page 6, lines 6-7. Support for newly added Claim 8 can be found in the specification on page 5, lines 29-34. Support for newly added Claim 9 can be found in the specification on page 4, lines 22-28. Support for newly added Claim 10 can be found in the specification on page 6, lines 29-30 and page 7, lines 2-5. Support for newly added Claim 11 can be found in the specification on page 6, lines 25-27. Support for newly added Claim 12 can be found in the specification on page 8, lines 7-8. No new matter is added.

Elections/Restrictions

The outstanding Office Action requires an election among three groups of inventions identified by the Examiner:

Group I, claims 1-3, drawn to process of making molded part using a composite sandwich.

Group II, claim 4, drawn to a molded part

Group III, claim 5, drawn to a composite part

Applicant hereby affirms the provisional election made with traverse to prosecute the invention of Group I, claims 1-3, as made by Applicant's representative, Margaret Millikin on August 28, 2008, during a telephone conversation with the Examiner.

Applicant respectfully traverses the restriction requirement and requests reconsideration and withdrawal of the restriction requirement, as Applicant believes the search and examination of the entire application can be made without serious burden. If Applicant's request for reconsideration is denied, Applicant requests cancellation of the claims relating to the non-elected groups without prejudice to the filing of one or more divisional applications.

Objection to the Specification

In item 4 of the outstanding Office Action, the abstract of the disclosure was objected to because it has two paragraphs. The abstract has been amended accordingly by providing a substitute Abstract with a single paragraph.

Rejection of Claims 1-3 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,186,999 to Brambach

In the outstanding Office Action, Claims 1-3 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,186,999 to Brambach.

Regarding Claim 1, the Examiner asserts Brambach teaches a process for manufacturing a moulded part (sheet-like material at column 1, line 12) in which the moulded part is obtained by moulding at least one composite sandwich (core material sandwich, column 1, lines 58-63), the said sandwich incorporating an expansion agent that reacts during moulding (expandable material, column 3, lines 36-39).

As noted in Applicant's disclosure, heating a sandwich comprising a core with external skins -- during manufacture of the sandwich or subsequent moulding -- causes two problems: 1) reduced compressive and flexural strength of the core and 2) frequent production of surface flaws, such as small hollows facing each hole of a honeycomb core (page 1, lines 10-22). The method of Applicant's invention advantageously provides a single solution to both of these problems. In the method of Applicant's invention, reaction of an expansion agent during moulding advantageously causes a gas to be generated, which exerts a backpressure, or makes the pressure uniform during moulding. The skin is pressed uniformly against the walls of the mould without forming depressions. (page 8, lines 28-33) The resulting moulded part has good compressive and/or flexural strength, suitable for use in the automotive field or in the building industry, and also has a taut surface appearance (page 8, lines 28-33; page 2, lines 2-3; and page 1, lines 2-3).

Applicant respectfully submits that Brambach fails entirely to recognize these problems and so is silent as to a solution. Furthermore, Applicant respectfully submits that Brambach teaches a different process to achieve a different result.

Applicant notes that Brambach teaches a process for manufacturing a sheet-like sandwich material comprising a core material of thermoplastic, foamed material or honeycomb structure sandwiched between two reinforced top layers (Abstract). The foam may be generated in situ during the manufacture of the sandwich material (column 3, lines 65-67). The top layers consist of thermoplastic material reinforced with fibers (Abstract). The sandwich material is provided with a local reinforcement by injecting plastic material under pressure into the core material through one of the top layers (Abstract). The plastic material replaces and/or melts the core material at the place where it is injected, and hardens after injection so that a local

reinforcement is formed. The plastic material is injected at the reinforcement location for the very particular purpose of applying fixtures, hinges, brackets, lamp holders and the like (column 2, lines 20-39).

Applicant submits that the sections of Brambach cited by the Examiner in rejecting Claim 1 fail to mention moulding, or a moulding step of any kind. Applicant submits that Brambach nowhere teaches or suggests a process for manufacturing a moulded part that includes a step that employs "an expansion agent that reacts *during moulding*", as recited in Claim 1, or that there are any advantages to be gained by doing so. As noted in Applicant's disclosure, any prior action carried out independently of the moulding is useless for solving the problems described above. In particular, to prevent the appearance of surface flaws, the desired action of the expansion agent must take place, at least in part, during moulding (page 5, lines 6-12).

Applicant submits that Brambach mentions moulding only in the very particular context of using the nozzle (die piece) of an injection moulding machine as the source of the plastic material to be injected into the core (column 4, lines 40-43 and column 6, lines 11-13), or in the very particular context of providing auxiliary means (threaded bushings, hinges, pivots, and the like) at the location of the reinforcement by means of injection moulding (column 5, lines 44-46 and lines 60-68).

In order for a reference to be anticipatory, each and every element of the claimed invention must be found within the four corners of the cited reference. Because Brambach does not teach (or suggest) a process for manufacturing a moulded part that includes a step that employs "an expansion agent that reacts

during moulding", as required by Claim 1, Applicants submit that Brambach is not an anticipatory reference.

In light of the above, Applicant submits that Claim 1 is not anticipated by Brambach, that this rejection should be withdrawn, and that Claim 1 is in condition for allowance. Additionally, Applicant submits that because Claims 2-3 are dependent upon Claim 1 and contain the same elements as Claim 1, dependent Claims 2-3 are in condition for allowance for at least those reasons.

Regarding Claim 2, the Examiner asserts Brambach remains as applied in Claim 1 and further teaches that the expansion agent is incorporated into the core of the sandwich (column 3, line 43). Applicant notes that column 3, line 43 reads, in its entirety, "core material and an additional bonding layer." Applicant submits that the cited section fails to teach or suggest a process in which an expansion agent "is incorporated into the core of the sandwich", as recited in Claim 2. Applicant therefore respectfully submits that the rejection of Claim 2 under 35 U.S.C. §102(b) should be withdrawn.

Regarding Claim 3, the Examiner asserts Brambach remains as applied in Claim 1 and further teaches that the expansion agent is applied to the core and/or its skin (column 3, line 43). Applicant again notes that column 3, line 43 reads, in its entirety, "core material and an additional bonding layer." Applicant submits that the cited section fails to teach or suggest a process in which an expansion agent "is applied to the core and/or its skin", as recited in Claim 3. Applicant therefore respectfully submits that the rejection of Claim 3 under 35 U.S.C. §102(b) should be withdrawn.

Miscellaneous

The Examiner indicates that the prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The Examiner cited U.S. Patent No. 4,121,008 to Seddon and U.S. Patent No. 5,851,336 to Cundiff et al. Applicant has reviewed these references and found them to be no more pertinent than the prior art relied upon by the Examiner.

Conclusion

Consequently, in light of the above discussion the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested. If any fees are due in connection with the filing of this notice, please charge such necessary fees to Deposit Account No. 50-0568.

Respectfully submitted,



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